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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/809,141	03/15/2001	Daniel Lieberman	11CX-D2	5355

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EXAMINER
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CULBERT, ROBERTS P

ART UNIT	PAPER NUMBER
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1763

DATE MAILED: 10/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/809,141	LIEBERMAN, DANIEL	
	<b>Examiner</b>	<b>Art Unit</b>	
	Roberts Culbert	1763	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 September 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

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**DETAILED ACTION*****Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/18/06 has been entered.

***Response to Arguments***

Applicant's arguments filed 9/27/06 have been fully considered but they are not persuasive.

Applicant has argued that the rejection of claims 1-12 under 35 U.S.C. §112, first paragraph should be withdrawn since one of ordinary skill in the art would appreciate that *"by adjusting the speed of the demetallization roller 9, the demetallization roller is displaced either slightly forward or backward with respect to the pre-printed web 40."* The argument is not persuasive because applicant specifically states that the speed adjustment of the roller adjusts the speed of the web. Page 4 of the specification recites,

*"The speed at which the web 40 travels is determined by the registration information conveyed by the registration sensor 4 to the demetallization station 5 and is controlled by a servo motor 11 attached to the demetallization station...The servo motor 11 then adjusts the speed of the demetallization station roller 9 and thus the speed at which the web 40 travels in order to ensure that the demetallization occurs exactly where designed in relation to the original images."*

Applicant further asserts that U.S. Patent 5,615,609 to Hill et al, and the website howstuffworks.com illustrate that it is well within the capabilities of one of ordinary skill in the printing arts to understand how the changing of the speed of the roller and film causes the demetallization to change relative to the pre-printed image. However, the argument is not persuasive since applicant teaches changing of the speed of the roller, which changes the speed

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of the film. The cited references may teach a method of image registration, but do not teach how to perform image registration by changing of the speed of the roller, which changes the speed of the film.

Applicant has argued that Mallik does not show holographic images in register to the pre-printed images on a substrate. However the argument is not clear since Mallik clearly illustrates (Figures 1-2) a holographic image (19) that is in register to the pre-printed images (13, 15) on a substrate.

Applicant has argued that Wilson and Mallik are not properly combinable since Wilson is directed to the use of a single substrate and Mallik pertains to a pair of substrates. However, the argument is not persuasive since Wilson does not teach merely a single substrate, but teaches that the film may be a portion of other substrates as previously recited. (Col. 7, Lines 29-32)

Applicant has argued that Wilson, Mallik and Hurley fail to teach certain features of the claimed invention. However, in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-12 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

While the roller and film are in contact, they move together at the same speed, and the position of the roller surface relative to the web surface remains the same. According to the

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specification, the registration marks are used to adjust the speed of the roller and film. It is not clear how the changing speed of the roller and film causes the demetalization location to change relative to the pre-printed image (i.e. in register) since the location of the demetalization pattern is fixed relative to the pre-printed web.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 4,959,120 to Wilson in view of U.S. Patent 5,128,779 to Mallik and in further view of U.S Patent 4,745,288 to Hurley et al.**

Wilson teaches a method for the selective demetallization of a web coated with a metal film. Referring to figure 7, Wilson shows conveying the web material through a demetallization station including indexing means (reads on means to rotate a print roller) whereby predetermined portions of the metal film are removed or thinned to create or reveal visual elements of the web material.

Wilson does not show the use of a web having a preprinted image. Wilson only suggests that the process is useful for making security documents such as a credit card (Col. 7, Line 29-32). Mallik shows a web coated with a metallic foil for producing the same type of authenticating documents (Col 1, Lines 15-20). The web has printed information and images on the surface that may be seen through a demetallized layer. See figure 1. It would have been obvious to one of ordinary skill in the art at the time of invention to use a preprinted web as shown by Mallik in the method of Wilson in order to produce a security document that contains suitable information, such

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as personal identification. Motivation to use the materials of Mallik with the demetalization process of Wilson is likewise given in Mallik (Col. 6, Lines 21-32 and 54-59).

Wilson also does not show demetallizing the web in registration with a preprinted image. Mallik, however, does show the demetallization in registration with the preprinted image. See figure 2. It would have been obvious to one of ordinary skill in the art at the time invention to demetallize the web in registration with a preprinted image in order to create a feature that cannot be easily altered or duplicated. The visual information behind the hologram on a surface to which it is attached can then be viewed through the non-reflective areas of the hologram (Col. 2, Lines 44-46).

Wilson in view of Mallik does not expressly show an automated means for demetallizing the web in registration with a preprinted image. However, the film is clearly aligned either manually or using an automated means. Hurley teaches the use of a controller to sense the presence and location of registration marks on a web as the web passes a scanner (observation means). Then the controller sends a signal to modify downstream operations such as printing or in this case the alignment of the demetalization roll. See abstract. It would have been obvious to one of ordinary skill in the art at the time invention to use the controller registration marks and observation means of Hurley to automate the printing means of Wilson in view of Mallik in order to automate a manual activity. See *In re Venner* 120 USPQ 193, 194 (CCPA) 1958.

Regarding claims 2-6 and 11-12, the office takes notice that the several listed methods of image formation and web materials used are old and well known in the art of secure document production and that one of ordinary skill would be expected to know them.

Regarding claim 7, Mallik teaches the attachment of the demetallized web to another web having images thereon, using an adhesive between materials, and thereafter adhesively transferring, in registration, areas of images from the second web to the demetallized web by a cold foil stamping process (Col. 4, Line 63- Col. 5, Line 5). Note that both hot and cold stamping processes are old and well-known methods in the art of producing secure documents.

Regarding claims 8 and 10, Mallik shows demetallization revealing designs or patterns hidden in the original images on the web. Mallik also shows removal of metal from an area

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adjacent to but not covering originally placed images. See figures 2, 9 and 10. It would have been obvious to one of ordinary skill in the art at the time of invention to selectively remove the metal over and around the pre-placed images on the web in order to increase the difficulty of counterfeiting the structure.

Regarding claim 9, the use of moiré patterns in security documents such as currency is old and well known in the art as admitted by applicant in paragraph 35. It would have been obvious to one of ordinary skill in the art at the time invention to use a moiré pattern in order to produce a document that is extremely difficult to duplicate.

### ***Conclusion***

All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could be finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberts Culbert whose telephone number is (571) 272-1433. The examiner can normally be reached on Monday-Friday (8:30-5:00).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on (571) 272-1435. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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